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RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/385,918

DATE: 09/09/1999  
TIME: 10:44:30

Input Set: I385918.RAW

This Raw Listing contains the General Information  
Section and up to first 5 pages.

ENTERED

1 <110> APPLICANT: Hoekstra, Merl F.  
2 Xie, Weilin  
3 Murray, Brion  
4 Mercurio, Frank  
5 <120> TITLE OF INVENTION: METHODS FOR MODULATING SIGNAL  
6 TRANSDUCTION MEDIATED BY TGF-BETA AND RELATED PROTEINS  
7 <130> FILE REFERENCE: 860098.433  
8 <140> CURRENT APPLICATION NUMBER: US/09/385,918  
9 <141> CURRENT FILING DATE: 1999-08-30  
10 <160> NUMBER OF SEQ ID NOS: 32  
11 <170> SOFTWARE: FastSEQ for Windows Version 3.0  
12 <210> SEQ ID NO 1  
13 <211> LENGTH: 108  
14 <212> TYPE: PRT  
15 <213> ORGANISM: Homo sapien  
16 <220> FEATURE:  
17 <221> NAME/KEY: VARIANT  
18 <222> LOCATION: (1)...(1)  
19 <223> OTHER INFORMATION: Xaa = Tyrosine or Phenylalanine  
20 <220> FEATURE:  
21 <221> NAME/KEY: VARIANT  
22 <222> LOCATION: (2)...(4)  
23 <223> OTHER INFORMATION: Xaa = any amino acid; 0-1 residues may be missing  
24 <220> FEATURE:  
25 <221> NAME/KEY: VARIANT  
26 <222> LOCATION: (6)...(16)  
27 <223> OTHER INFORMATION: Xaa = any amino acid; 0-3 residues may be missing  
28 <220> FEATURE:  
29 <221> NAME/KEY: VARIANT  
30 <222> LOCATION: (20)...(20)  
31 <223> OTHER INFORMATION: Xaa = any amino acid  
32 <220> FEATURE:  
33 <221> NAME/KEY: VARIANT  
34 <222> LOCATION: (22)...(22)  
35 <223> OTHER INFORMATION: Xaa = Valine, Isoleucine or Leucine  
36 <220> FEATURE:  
37 <221> NAME/KEY: VARIANT  
38 <222> LOCATION: (23)...(27)  
39 <223> OTHER INFORMATION: Xaa = any amino acid  
40 <220> FEATURE:  
41 <221> NAME/KEY: VARIANT  
42 <222> LOCATION: (29)...(29)  
43 <223> OTHER INFORMATION: Xaa = any amino acid  
44 <220> FEATURE:

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45 <221> NAME/KEY: VARIANT  
46 <222> LOCATION: (30)...(30) /  
47 <223> OTHER INFORMATION: Xaa = Lysine or Arginine  
48 <220> FEATURE:  
49 <221> NAME/KEY: VARIANT  
50 <222> LOCATION: (31)...(33) /  
51 <223> OTHER INFORMATION: Xaa = any amino acid  
52 <220> FEATURE:  
53 <221> NAME/KEY: VARIANT  
54 <222> LOCATION: (34)...(34) /  
55 <223> OTHER INFORMATION: Xaa = Leucine or Valine  
56 <220> FEATURE:  
57 <221> NAME/KEY: VARIANT  
58 <222> LOCATION: (37)...(37) /  
59 <223> OTHER INFORMATION: Xaa = Valine or Leucine  
60 <220> FEATURE:  
61 <221> NAME/KEY: VARIANT  
62 <222> LOCATION: (40)...(40) /  
63 <223> OTHER INFORMATION: Xaa = Threonine or Serine  
64 <220> FEATURE:  
65 <221> NAME/KEY: VARIANT  
66 <222> LOCATION: (41)...(41) /  
67 <223> OTHER INFORMATION: Xaa = any amino acid  
68 <220> FEATURE:  
69 <221> NAME/KEY: VARIANT  
70 <222> LOCATION: (45)...(45) /  
71 <223> OTHER INFORMATION: Xaa = Leucine, Valine, Methionine, Alanine or  
72 Isoleucine  
73 <220> FEATURE:  
74 <221> NAME/KEY: VARIANT  
75 <222> LOCATION: (46)...(46) /  
76 <223> OTHER INFORMATION: Xaa = any amino acid  
77 <220> FEATURE:  
78 <221> NAME/KEY: VARIANT  
79 <222> LOCATION: (49)...(50) /  
80 <223> OTHER INFORMATION: Xaa = any amino acid  
81 <220> FEATURE:  
82 <221> NAME/KEY: VARIANT  
83 <222> LOCATION: (52)...(61) /  
84 <223> OTHER INFORMATION: Xaa = any amino acid; 0-6 residues may be missing  
85 <220> FEATURE:  
86 <221> NAME/KEY: VARIANT  
87 <222> LOCATION: (63)...(71) /  
88 <223> OTHER INFORMATION: Xaa = any amino acid; 0-2 residues may be missing  
89 <220> FEATURE:  
90 <221> NAME/KEY: VARIANT  
91 <222> LOCATION: (74)...(75) /  
92 <223> OTHER INFORMATION: Xaa = any amino acid  
93 <220> FEATURE:  
94 <221> NAME/KEY: VARIANT

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95 <222> LOCATION: (81)...(81) ✓
96 <223> OTHER INFORMATION: Xaa = any amino acid
97 <220> FEATURE:
98 <221> NAME/KEY: VARIANT
99 <222> LOCATION: (86)...(86) ✓
100 <223> OTHER INFORMATION: Xaa = any amino acid
101 <220> FEATURE:
102 <221> NAME/KEY: VARIANT
103 <222> LOCATION: (88)...(88) ✓
104 <223> OTHER INFORMATION: Xaa = any amino acid
105 <220> FEATURE:
106 <221> NAME/KEY: VARIANT
107 <222> LOCATION: (90)...(92) ✓
108 <223> OTHER INFORMATION: Xaa = any amino acid
109 <220> FEATURE:
110 <221> NAME/KEY: VARIANT
111 <222> LOCATION: (93)...(93) ✓
112 <223> OTHER INFORMATION: Xaa = Leucine or Methionine
113 <220> FEATURE:
114 <221> NAME/KEY: VARIANT
115 <222> LOCATION: (94)...(95) ✓
116 <223> OTHER INFORMATION: Xaa = any amino acid
117 <220> FEATURE:
118 <221> NAME/KEY: VARIANT
119 <222> LOCATION: (96)...(96) ✓
120 <223> OTHER INFORMATION: Xaa = Arginine or Lysine
121 <220> FEATURE:
122 <221> NAME/KEY: VARIANT
123 <222> LOCATION: (98)...(99) ✓
124 <223> OTHER INFORMATION: Xaa = any amino acid
125 <220> FEATURE:
126 <221> NAME/KEY: VARIANT
127 <222> LOCATION: (102)...(107) ✓
128 <223> OTHER INFORMATION: Xaa = any amino acid; 0-2 residues may be missing
129 <400> SEQUENCE: 1
W--> 130 Xaa Xaa Xaa Xaa Tyr Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
131      1          5          10          15
W--> 132 Trp Phe Trp Xaa Ile Xaa Xaa Xaa Xaa Xaa Xaa Glu Xaa Xaa Xaa Xaa
133      20          25          30
W--> 134 Xaa Xaa Gln Phe Xaa Thr Gly Xaa Xaa Arg Leu Pro Xaa Xaa Gly Phe
135      35          40          45
W--> 136 Xaa Xaa Leu Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Ile Xaa Xaa
137      50          55          60
W--> 138 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Leu Pro Xaa Xaa His Thr Cys Phe Asn
139      65          70          75          80
W--> 140 Xaa Leu Asp Leu Pro Xaa Tyr Xaa Ser Xaa Xaa Xaa Xaa Xaa Xaa Xaa
141      85          90          95
W--> 142 Leu Xaa Xaa Ala Ile Xaa Xaa Xaa Xaa Xaa Xaa Phe
143      100          105
144 <210> SEQ ID NO 2

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145 <211> LENGTH: 33  
146 <212> TYPE: PRT  
147 <213> ORGANISM: Homo sapien  
148 <220> FEATURE:  
149 <221> NAME/KEY: VARIANT /  
150 <222> LOCATION: (5)...(5)  
151 <223> OTHER INFORMATION: Xaa = any amino acid  
152 <220> FEATURE:  
153 <221> NAME/KEY: VARIANT  
154 <222> LOCATION: (9)...(11) /  
155 <223> OTHER INFORMATION: Xaa = any amino acid  
156 <220> FEATURE:  
157 <221> NAME/KEY: VARIANT  
158 <222> LOCATION: (12)...(14)  
159 <223> OTHER INFORMATION: Xaa = independently selected polar amino acid  
160 (e.g., S,H,P,D,E,T or Y)  
161 <220> FEATURE:  
162 <221> NAME/KEY: VARIANT  
163 <222> LOCATION: (16)...(16) /  
164 <223> OTHER INFORMATION: Xaa = independently selected polar amino acid  
165 (e.g., S,H,P,D,E,T or Y)  
166 <220> FEATURE:  
167 <221> NAME/KEY: VARIANT  
168 <222> LOCATION: (17)...(17)  
169 <223> OTHER INFORMATION: Xaa = any amino acid /  
170 <220> FEATURE:  
171 <221> NAME/KEY: VARIANT  
172 <222> LOCATION: (20)...(20) /  
173 <223> OTHER INFORMATION: Xaa = hydrophobic residue (e.g., I,V,L or M)  
174 <220> FEATURE:  
175 <221> NAME/KEY: VARIANT  
176 <222> LOCATION: (21)...(21) /  
177 <223> OTHER INFORMATION: Xaa = any amino acid  
178 <220> FEATURE:  
179 <221> NAME/KEY: VARIANT  
180 <222> LOCATION: (25)...(25) /  
181 <223> OTHER INFORMATION: Xaa = independently selected polar amino acid  
182 (e.g., S,H,P,D,E,T or Y)  
183 <220> FEATURE:  
184 <221> NAME/KEY: VARIANT /  
185 <222> LOCATION: (28)...(28)  
186 <223> OTHER INFORMATION: Xaa = independently selected polar amino acid  
187 (e.g., S,H,P,D,E,T or Y)  
188 <220> FEATURE:  
189 <221> NAME/KEY: VARIANT /  
190 <222> LOCATION: (30)...(30)  
191 <223> OTHER INFORMATION: Xaa = any amino acid  
192 <220> FEATURE:  
193 <221> NAME/KEY: VARIANT  
194 <222> LOCATION: (31)...(31)

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195 <223> OTHER INFORMATION: Xaa = independently selected polar amino acid
196      (e.g., S,H,P,D,E,T or Y)
197 <220> FEATURE:
198 <221> NAME/KEY: VARIANT
199 <222> LOCATION: (33)...(33)
200 <223> OTHER INFORMATION: Xaa = independently selected polar amino acid
201      (e.g., S,H,P,D,E,T or Y)
202 <400> SEQUENCE: 2
W--> 203 Gly Pro Leu Pro Xaa Gly Trp Glu Xaa Xaa Xaa Xaa Xaa Gly Xaa
204      1 5 10 15
W--> 205 Xaa Tyr Tyr Xaa Xaa His Asn Thr Xaa Thr Thr Xaa Trp Xaa Xaa Pro
206      20 25 30
W--> 207 Xaa
208 <210> SEQ ID NO 3
209 <211> LENGTH: 38
210 <212> TYPE: PRT
211 <213> ORGANISM: Homo sapien
212 <400> SEQUENCE: 3
213 Ser Pro Leu Pro Pro Gly Trp Glu Glu Arg Gln Asp Ile Leu Gly Arg
214      1 5 10 15
215 Thr Tyr Tyr Val Asn His Glu Ser Arg Arg Thr Gln Trp Lys Arg Pro
216      20 25 30
217 Thr Pro Gln Asp Asn Leu
218      35
219 <210> SEQ ID NO 4
220 <211> LENGTH: 38
221 <212> TYPE: PRT
222 <213> ORGANISM: Homo sapien
223 <400> SEQUENCE: 4
224 Ser Gly Leu Pro Pro Gly Trp Glu Glu Arg Gln Asp Ile Leu Gly Arg
225      1 5 10 15
226 Thr Tyr Tyr Val Asn His Glu Ser Arg Arg Thr Gln Trp Lys Arg Pro
227      20 25 30
228 Thr Pro Gln Asp Asn Leu
229      35
230 <210> SEQ ID NO 5
231 <211> LENGTH: 38
232 <212> TYPE: PRT
233 <213> ORGANISM: Homo sapien
234 <400> SEQUENCE: 5
235 Gly Phe Leu Pro Lys Gly Trp Glu Val Arg His Ala Pro Asn Gly Arg
236      1 5 10 15
237 Pro Phe Phe Ile Asp His Asn Thr Lys Thr Thr Thr Trp Glu Asp Pro
238      20 25 30
239 Arg Leu Lys Ile Pro Ala
240      35
241 <210> SEQ ID NO 6
242 <211> LENGTH: 38
243 <212> TYPE: PRT
244 <213> ORGANISM: Homo sapien

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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Input Set: I385918.RAW

Line	?	Error/Warning	Original Text
130	W	"N" or "Xaa" used: Feature required	Xaa Xaa Xaa Xaa Tyr Xaa Xaa Xaa Xaa Xaa X
132	W	"N" or "Xaa" used: Feature required	Trp Phe Trp Xaa Ile Xaa Xaa Xaa Xaa Xaa X
134	W	"N" or "Xaa" used: Feature required	Xaa Xaa Gln Phe Xaa Thr Gly Xaa Xaa Arg L
136	W	"N" or "Xaa" used: Feature required	Xaa Xaa Leu Xaa Xaa Xaa Xaa Xaa Xaa Xaa X
138	W	"N" or "Xaa" used: Feature required	Xaa Xaa Xaa Xaa Xaa Xaa Xaa Leu Pro Xaa X
140	W	"N" or "Xaa" used: Feature required	Xaa Leu Asp Leu Pro Xaa Tyr Xaa Ser Xaa X
142	W	"N" or "Xaa" used: Feature required	Leu Xaa Xaa Ala Ile Xaa Xaa Xaa Xaa Xaa X
203	W	"N" or "Xaa" used: Feature required	Gly Pro Leu Pro Xaa Gly Trp Glu Xaa Xaa X
205	W	"N" or "Xaa" used: Feature required	Xaa Tyr Tyr Xaa Xaa His Asn Thr Xaa Thr T
207	W	"N" or "Xaa" used: Feature required	Xaa
338	W	"N" or "Xaa" used: Feature required	Pro Pro Xaa Tyr
353	W	"N" or "Xaa" used: Feature required	Xaa Pro Pro Pro Xaa Tyr
371	W	"N" or "Xaa" used: Feature required	Pro Ala Asp Thr Pro Pro Pro Ala Tyr Xaa P
389	W	"N" or "Xaa" used: Feature required	Thr Pro Pro Pro Gly Tyr Xaa Ser Glu Asp G